

IN THE ABSTRACT

Please amend the Abstract of the Disclosure as follows:

~~The invention achieves a~~ A dc motor drive system ~~by the~~
with a PWM control system that permits a high-accuracy
rotation drive control while detecting the currents flowing
into the coils without using ~~the~~ shunt resistors. The system
drives output MOS transistors by the PWM control to make the
currents flow into the coils, and drives to rotate the dc
motor. The system includes current sensing MOS transistors
having a predetermined size ratio $1/m$ ($M > 1$) to the output MOS
transistors that make the currents flow into the coils. ~~The~~
~~source terminals of the current sensing MOS transistors are~~
~~commonly connected to the source terminals of the output MOS~~
~~transistors.~~ The current sensing MOS transistors are capable
of making flow reduced currents proportional to the currents
of the output MOS transistors. ~~The gate terminals of the~~
~~current sensing MOS transistors receive the signals identical~~
~~to the signals being applied to the gate terminals of the~~
~~output MOS transistors.~~ And, the system has a means that
monitors drain voltages of the output MOS transistors, and
applies the voltages identical to the drain voltages to the
drain terminals of the current sensing MOS transistors.

Abstract of the Disclosure

A dc motor drive system with a PWM control system permits a high-accuracy rotation drive control while detecting the currents flowing into the coils without using shunt resistors. The system drives output MOS transistors by the PWM control to make the currents flow into the coils, and drives to rotate the dc motor. The system includes current sensing MOS transistors having a predetermined size ratio $1/m$ ($M > 1$) to the output MOS transistors that make the currents flow into the coils. The current sensing MOS transistors are capable of making flow reduced currents proportional to the currents of the output MOS transistors.